

SAND AND MUD BAR (NARROWLEAF POND-LILY SUBTYPE)

Concept: The Narrowleaf Pond-Lily Subtype of Sand and Mud Bar encompasses areas on edges of blackwater river channels that are dominated by *Nuphar sagittifolia*. These areas are permanently or nearly permanently flooded.

Distinguishing Features: This community is distinguished from all others by dominance of *Nuphar sagittifolia* in a nontidal, blackwater river setting. The Narrowleaf Pond-Lily Subtype of Tidal Freshwater Marsh may occur in downstream portions of blackwater rivers and is similar except for having tidal water level fluctuations. *Zizaniopsis miliacea* or other species of Tidal Freshwater Marsh may be present in it.

Synonyms: *Nuphar sagittifolia* Herbaceous Vegetation (CEGL004328).

Ecological Systems: Atlantic Coastal Plain Small Blackwater River Floodplain Forest (CES203.249).

Sites: The Narrowleaf Pond-Lily Subtype occurs on edges of river channels with minimal current or in backwaters.

Soils: Soils are soft sediment, probably of silt or muck.

Hydrology: The Narrowleaf Pond-Lily Subtype is essentially permanently flooded.

Vegetation: The vegetation consists of a dense-to-moderate bed of *Nuphar sagittifolia*. Usually no other vascular plants are present.

Range and Abundance: Ranked G3? but perhaps rarer. In North Carolina it is known in well-developed form only on the Waccamaw River. Though still rare, Tidal Freshwater Marsh (Narrowleaf Pond-Lily), on tidally influenced rivers, is more abundant. The association is also attributed to South Carolina, where it may occur only on the Waccamaw River.

Associations and Patterns: This community occurs in the river channel. It may border Cypress–Gum Swamp or Blackwater Bottomland Hardwoods.

Variation: Nothing is known of variation.

Dynamics: Nothing specific is known about the dynamics of this community.

Comments: The existence of three very similar communities dominated by *Nuphar sagittifolia* is perhaps only marginally acceptable, but the distinctive hydrologic environment of each appears to justify it. All three occur in South Carolina, in the narrow range of this species. A comparable *Nuphar advena* subtype may also exist on other blackwater rivers outside of the range of *Nuphar sagittifolia* but has not been documented.

Rare species: Though not documented, rare aquatic species of the Waccamaw River such as *Procambarus braswelli* and *Enneacanthus chaetodon* may occur in this community.

References: